

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 116)

FOIL the expressions shown below:

1. $(-6x - 5)(8x - 3)$

$$\begin{aligned} &(-6)(8)x^2 + (-6)(-3)x + (-5)(8)x + (-5)(-3) \\ &(-48)x^2 + (18)x + (-40)x + (15) \\ &-48x^2 - 22x + 15 \end{aligned}$$

2. $(5x - 3)(7x - 3)$

$$\begin{aligned} &(5)(7)x^2 + (5)(-3)x + (-3)(7)x + (-3)(-3) \\ &(35)x^2 + (-15)x + (-21)x + (9) \\ &35x^2 - 36x + 9 \end{aligned}$$

3. $(-9x + 5)(8x - 9)$

$$\begin{aligned} &(-9)(8)x^2 + (-9)(-9)x + (5)(8)x + (5)(-9) \\ &(-72)x^2 + (81)x + (40)x + (-45) \\ &-72x^2 + 121x - 45 \end{aligned}$$

4. $(-7x + 8)(2x + 4)$

$$\begin{aligned} &(-7)(2)x^2 + (-7)(4)x + (8)(2)x + (8)(4) \\ &(-14)x^2 + (-28)x + (16)x + (32) \\ &-14x^2 - 12x + 32 \end{aligned}$$

5. $(-8x + 7)(-3x + 6)$

$$\begin{aligned} &(-8)(-3)x^2 + (-8)(6)x + (7)(-3)x + (7)(6) \\ &(24)x^2 + (-48)x + (-21)x + (42) \\ &24x^2 - 69x + 42 \end{aligned}$$

FOIL the expressions shown below:

6. $(3x + 5)(-3x - 6)$

$$\begin{aligned}(3)(-3)x^2 + (3)(-6)x + (5)(-3)x + (5)(-6) \\ (-9)x^2 + (-18)x + (-15)x + (-30) \\ -9x^2 - 33x - 30\end{aligned}$$

7. $(8x - 4)(5x - 5)$

$$\begin{aligned}(8)(5)x^2 + (8)(-5)x + (-4)(5)x + (-4)(-5) \\ (40)x^2 + (-40)x + (-20)x + (20) \\ 40x^2 - 60x + 20\end{aligned}$$

8. $(8x - 7)(8x + 8)$

$$\begin{aligned}(8)(8)x^2 + (8)(8)x + (-7)(8)x + (-7)(8) \\ (64)x^2 + (64)x + (-56)x + (-56) \\ 64x^2 + 8x - 56\end{aligned}$$

9. $(-7x + 7)(-3x - 3)$

$$\begin{aligned}(-7)(-3)x^2 + (-7)(-3)x + (7)(-3)x + (7)(-3) \\ (21)x^2 + (21)x + (-21)x + (-21) \\ 21x^2 - 21\end{aligned}$$

10. $(-9x + 6)(-6x + 4)$

$$\begin{aligned}(-9)(-6)x^2 + (-9)(4)x + (6)(-6)x + (6)(4) \\ (54)x^2 + (-36)x + (-36)x + (24) \\ 54x^2 - 72x + 24\end{aligned}$$